

Section 4

1998 Bicyclist-Motor Vehicle Crashes, Injury Crashes and Fatal Crashes

1992 - 1998 Bicyclist-Motor Vehicle Crashes	4.2
1998 Bicyclist-Motor Vehicle Crash Severity	4.3
1998 Bicyclist-Motor Vehicle Crashes by County	4.4
1998 Bicyclist-Motor Vehicle Crash Times	4.6
1998 Bicyclist-Motor Vehicle Crash Characteristics.....	4.9
1998 Bicyclist-Motor Vehicle Crash Violations and Contributing Factors.....	4.10
1998 Drivers Involved in Bicyclist-Motor Vehicle Crashes.....	4.12
1998 Bicyclist Injury Severity	4.14
1998 Bicyclists by County	4.15
1998 Bicyclist Characteristics	4.16

TABLES

Table 4.01 Bicyclist-Motor Vehicle Crashes, Injury Crashes and Fatal Crashes, 1992 - 1998
Table 4.02 Bicyclist-Motor Vehicle Crashes, Injury Crashes and Fatal Crashes by County, 1998
Table 4.03 Bicyclist-Motor Vehicle Crashes, Injury Crashes and Fatal Crashes by County, 1997 - 1998
Table 4.04 Hour of Bicyclist-Motor Vehicle Crashes, Injury Crashes and Fatal Crashes, 1998
Table 4.05 Month of Bicyclist-Motor Vehicle Crashes, Injury Crashes and Fatal Crashes, 1998
Table 4.06 Day of Week for Bicyclist-Motor Vehicle Crashes, Injury Crashes and Fatal Crashes, 1998
Table 4.07 Urban/Rural Location of Bicyclist-Motor Vehicle Crashes, Injury Crashes and Fatal Crashes, 1998
Table 4.08 Type of Vehicles Involved in Bicyclist-Motor Vehicle Crashes, Injury Crashes and Fatal Crashes, 1998
Table 4.09 Violations for Bicyclist-Motor Vehicle Crashes, Injury Crashes and Fatal Crashes, 1998
Table 4.10 Contributing Factors of Bicyclist-Motor Vehicle Crashes and Injury Crashes, 1998
Table 4.11 Age of Drivers Involved in Bicyclist-Motor Vehicle Crashes, Injury Crashes and Fatal Crashes, 1998
Table 4.12 Gender of Drivers Involved in Bicyclist-Motor Vehicle Crashes, Injury Crashes and Fatal Crashes, 1998
Table 4.13 Bicyclists, Injured Bicyclists and Bicyclist Fatalities by County, 1998
Table 4.14 Age of Bicyclists, Injured Bicyclists and Bicyclist Fatalities, 1998
Table 4.15 Gender of Bicyclists, Injured Bicyclists and Bicyclist Fatalities, 1998
Table 4.16 Bicyclist Action Prior to Crash, 1998

FIGURES

Figure 4.01 Bicyclist-Motor Vehicle Crashes, Injury Crashes and Fatal Crashes, 1992 - 1998
Figure 4.02 Severity of Bicyclist-Motor Vehicle Crashes as Reported by Police, 1998
Figure 4.03 Hour of Bicyclist-Motor Vehicle Injury Crashes and Fatal Crashes, 1998
Figure 4.04 Day of Week for Bicyclist-Motor Vehicle Crashes, Injury Crashes and Fatal Crashes, 1998
Figure 4.05 Age of Drivers Involved in Bicyclist-Motor Vehicle Crashes, Injury Crashes and Fatal Crashes, 1998
Figure 4.06 Bicyclist Injury Severity as Reported by Police, 1998
Figure 4.07 Age of Bicyclists, Injured Bicyclists and Bicyclist Fatalities Involved in a Crash, 1998

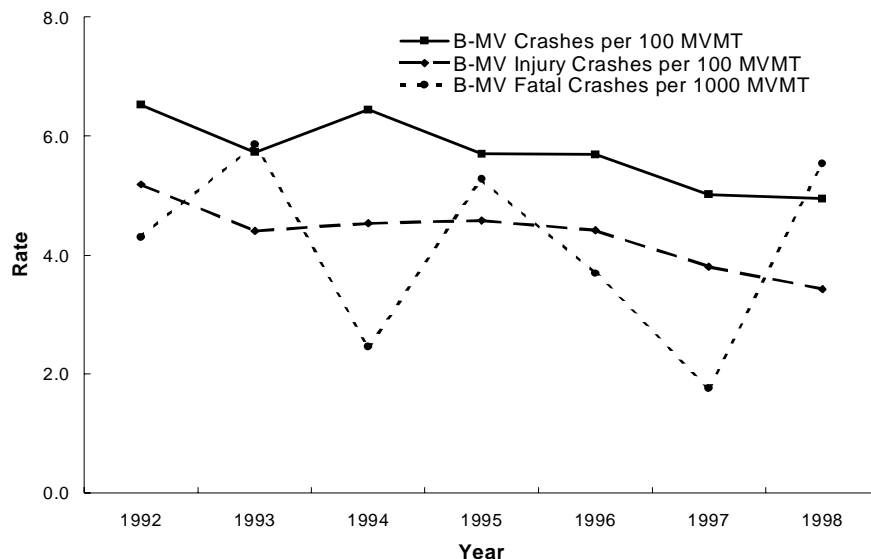
1992 - 1998 Bicyclist-Motor Vehicle Crashes

Table 4.01 and Figure 4.01 shows the trends in bicyclist-motor vehicle (B-MV) crashes for 1992 - 1998. The rates of bicyclist-motor vehicle crashes and injury crashes have decreased steadily since 1992, while fatal crashes varied year to year. The highest rate of bicyclist-motor vehicle crashes and injury crashes occurred in 1992, while the highest rate of fatal bicyclist-motor vehicle crashes occurred in 1993. The small number of bicyclist-motor vehicle fatal crashes makes it hard to compare increases and decreases from year to year.

Table 4.01 Bicyclist-Motor Vehicle (B-MV) Crashes, Injury Crashes and Fatal Crashes, 1992 - 1998

Year	B-MV Crashes		B-MV Injury Crashes		B-MV Fatal Crashes	
	#	Rate per 100 MVMT	#	Rate per 100 MVMT	#	Rate per 1000 MVMT
1992	1,061	6.5	843	5.2	7	4.3
1993	977	5.7	751	4.4	10	5.9
1994	1,047	6.4	819	4.5	4	2.5
1995	972	5.7	860	4.6	9	5.3
1996	925	5.7	858	4.4	6	3.7
1997	855	5.0	778	3.8	3	1.8
1998	804	4.9	728	3.4	9	5.5

Figure 4.01 Bicyclist-Motor Vehicle (B-MV) Crashes, Injury Crashes and Fatal Crashes, 1992 - 1998



1998 Bicyclist-Motor Vehicle Crash Severity

Figure 4.02 Severity of Bicyclist-Motor Vehicle Crashes as Reported by Police, 1998
(n=804)

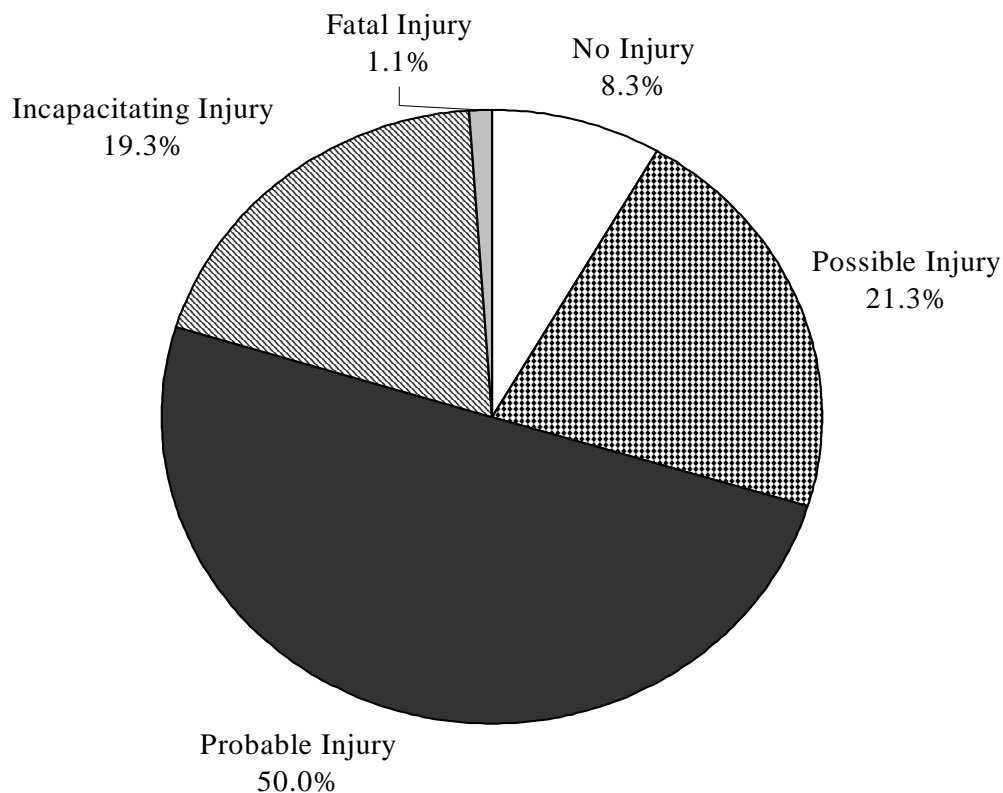


Figure 4.02 shows the breakdown of bicyclist-motor vehicle crash severity. Almost all bicyclist-motor vehicle crashes resulted in an injury (92%) compared to 37% of all motor vehicle crashes. However, bicyclist-motor vehicle crashes resulted in similar percentage (1%) of a death compared to all motor vehicle crashes.

The rates of bicycle involved crashes, injury crashes and fatal crashes by county are shown in Table 4.02. There are two different rates given, one based on population of the county and another on the miles traveled in the county. The top three counties for bicyclist involved crashes and injury crashes based on miles traveled were Utah, Salt Lake, and Cache. The majority of the fatal bicyclist-motor vehicle crashes based on miles traveled occurred in Salt Lake, and Washington counties.

1998 Bicyclist-Motor Vehicle Crashes by County

Table 4.02 Bicyclist-Motor Vehicle (B-MV) Crashes, Injury Crashes and Fatal Crashes by County, 1998

County	B-MV Crashes			B-MV Injury Crashes			B-MV Fatal Crashes		
	#	Rate per 10,000 Population	Rate per 100 MVMT	#	Rate per 10,000 Population	Rate per 100 MVMT	#	Rate per 100,000 Population	Rate per 10,000 MVMT
Beaver	3	4.7	1.5	3	4.7	1.5	0	0.0	0.0
Box Elder	10	2.4	1.2	9	2.2	1.0	1	2.4	11.6
Cache	39	4.3	5.3	36	4.0	4.9	0	0.0	0.0
Carbon	5	2.3	1.5	4	1.8	1.2	1	4.5	29.8
Daggett	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Davis	45	2.0	2.3	41	1.8	2.1	1	0.4	5.1
Duchesne	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Emery	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Garfield	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Grand	6	6.0	2.3	6	6.0	2.3	0	0.0	0.0
Iron	5	1.6	0.9	5	1.6	0.9	0	0.0	0.0
Juab	2	2.5	0.6	1	1.3	0.3	1	12.7	31.3
Kane	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Millard	3	2.4	0.8	2	1.6	0.5	0	0.0	0.0
Morgan	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Piute	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Rich	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Salt Lake	414	4.9	5.9	367	4.3	5.2	3	0.4	4.2
San Juan	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Sanpete	1	0.5	0.5	0	0.0	0.0	0	0.0	0.0
Sevier	2	1.1	0.6	2	1.1	0.6	0	0.0	0.0
Summit	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Tooele	1	0.3	0.2	1	0.3	0.2	0	0.0	0.0
Uintah	6	2.4	2.1	6	2.4	2.1	0	0.0	0.0
Utah	166	5.0	6.0	158	4.7	5.7	0	0.0	0.0
Wasatch	3	2.2	1.3	2	1.5	0.9	0	0.0	0.0
Washington	28	3.5	3.3	25	3.1	2.9	2	2.5	23.5
Wayne	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Weber	65	3.5	4.6	60	3.3	4.3	0	0.0	0.0
Statewide	804	3.8	3.8	728	3.5	3.4	9	0.4	4.2

The table below compares the rates of bicyclist-motor vehicle crashes in 1998 to 1997 by county. Most counties experienced only slight changes in bicyclist-motor vehicle crashes and injury crashes from 1997 to 1998. Several counties experienced a large increase in the rate of fatal bicyclist-motor vehicle crashes from 1997 to 1998, but the numbers of fatal crashes were too small to make any valid comparisons.

Table 4.03. Bicyclist-Motor Vehicle (B-MV) Crashes, Injury Crashes and Fatal Crashes by County, 1997 - 1998

County	B-MV Crashes				B-MV Injury Crashes				B-MV Fatal Crashes			
	1997		1998		1997		1998		1997		1998	
	#	Rate per 100 MVMT	#	Rate per 100 MVMT	#	Rate per 100 MVMT	#	Rate per 100 MVMT	#	Rate per 10000 MVMT	#	Rate per 10000 MVMT
Beaver	0	0.0	3	1.5	0	0.0	3	1.5	0	0.0	0	0.0
Box Elder	2	0.2	10	1.2	2	0.2	9	1.0	0	0.0	1	11.6
Cache	35	5.0	39	5.3	34	4.9	36	4.9	0	0.0	0	0.0
Carbon	2	0.7	5	1.5	2	0.7	4	1.2	0	0.0	1	29.8
Daggett	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Davis	67	3.6	45	2.3	65	3.5	41	2.1	1	5.4	1	5.1
Duchesne	2	1.1	0	0.0	2	1.1	0	0.0	0	0.0	0	0.0
Emery	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Garfield	3	2.5	0	0.0	3	2.5	0	0.0	0	0.0	0	0.0
Grand	7	2.9	6	2.3	7	2.9	6	2.3	0	0.0	0	0.0
Iron	9	1.8	5	0.9	7	1.4	5	0.9	0	0.0	0	0.0
Juab	0	0.0	2	0.6	0	0.0	1	0.3	0	0.0	1	31.3
Kane	2	1.7	0	0.0	2	1.7	0	0.0	0	0.0	0	0.0
Millard	5	1.3	3	0.8	5	1.3	2	0.5	0	0.0	0	0.0
Morgan	2	1.9	0	0.0	1	1.0	0	0.0	0	0.0	0	0.0
Piute	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Rich	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Salt Lake	398	5.7	414	5.9	350	5.0	367	5.2	1	1.4	3	4.2
San Juan	2	0.8	0	0.0	2	0.8	0	0.0	0	0.0	0	0.0
Sanpete	2	0.9	1	0.5	2	0.9	0	0.0	0	0.0	0	0.0
Sevier	3	0.9	2	0.6	3	0.9	2	0.6	0	0.0	0	0.0
Summit	4	0.7	0	0.0	4	0.7	0	0.0	0	0.0	0	0.0
Tooele	0	0.0	1	0.2	0	0.0	1	0.2	0	0.0	0	0.0
Uintah	7	2.6	6	2.1	5	1.8	6	2.1	0	0.0	0	0.0
Utah	211	8.0	166	6.0	195	7.4	158	5.7	1	3.8	0	0.0
Wasatch	0	0.0	3	1.3	0	0.0	2	0.9	0	0.0	0	0.0
Washington	30	3.7	28	3.3	27	3.3	25	2.9	0	0.0	2	23.5
Wayne	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Weber	57	4.2	65	4.6	56	4.1	60	4.3	0	0.0	0	0.0
Missing	5		0		4				0			
Statewide	844	4.1	804	3.8	773	3.8	728	3.4	3	1.5	9	4.2

1998 Bicyclist-Motor Vehicle Crash Times

Table 4.04 and Figure 4.03 shows that bicyclist-motor vehicle crashes and injury crashes peaked during the late afternoon and early evening hours (3 p.m. to 6 p.m.). Most of the fatal bicyclist-motor vehicle crashes occurred in the late afternoon (2 p.m. to 4 p.m.).

Summer months (June through August) had the largest rates of bicyclist-motor vehicle crashes, injury crashes and fatal crashes per day (Table 4.05).

Table 4.04 Hour of Bicyclist-Motor Vehicle (B-MV) Crashes, Injury Crashes and Fatal Crashes 1998

Hour	B-MV Crashes		B-MV Injury Crashes		B-MV Fatal Crashes	
	#	%	#	%	#	%
12 a.m.	4	0.5%	4	0.5%	0	0.0%
1 a.m.	1	0.1%	1	0.1%	0	0.0%
2 a.m.	2	0.2%	1	0.1%	0	0.0%
3 a.m.	1	0.1%	0	0.0%	1	11.1%
4 a.m.	0	0.0%	0	0.0%	0	0.0%
5 a.m.	5	0.6%	5	0.7%	0	0.0%
6 a.m.	12	1.5%	10	1.4%	1	11.1%
7 a.m.	26	3.2%	24	3.3%	0	0.0%
8 a.m.	40	5.0%	37	5.1%	0	0.0%
9 a.m.	20	2.5%	15	2.1%	1	11.1%
10 a.m.	41	5.1%	34	4.7%	1	11.1%
11 a.m.	34	4.2%	32	4.4%	0	0.0%
12 p.m.	42	5.2%	37	5.1%	0	0.0%
1 p.m.	41	5.1%	40	5.5%	0	0.0%
2 p.m.	61	7.6%	54	7.4%	1	11.1%
3 p.m.	69	8.6%	63	8.7%	2	22.2%
4 p.m.	87	10.8%	80	11.0%	1	11.1%
5 p.m.	90	11.2%	84	11.5%	0	0.0%
6 p.m.	74	9.2%	66	9.1%	0	0.0%
7 p.m.	60	7.5%	57	7.8%	0	0.0%
8 p.m.	33	4.1%	27	3.7%	0	0.0%
9 p.m.	27	3.4%	26	3.6%	0	0.0%
10 p.m.	20	2.5%	19	2.6%	0	0.0%
11 p.m.	14	1.7%	12	1.6%	1	11.1%
Grand Total	804	100.0%	728	100.0%	9	100.0%

Figure 4.03 Hour of Bicyclist-Motor Vehicle (B-MV) Injury Crashes and Fatal Crashes, 1998 (See Table 4.04 for values)

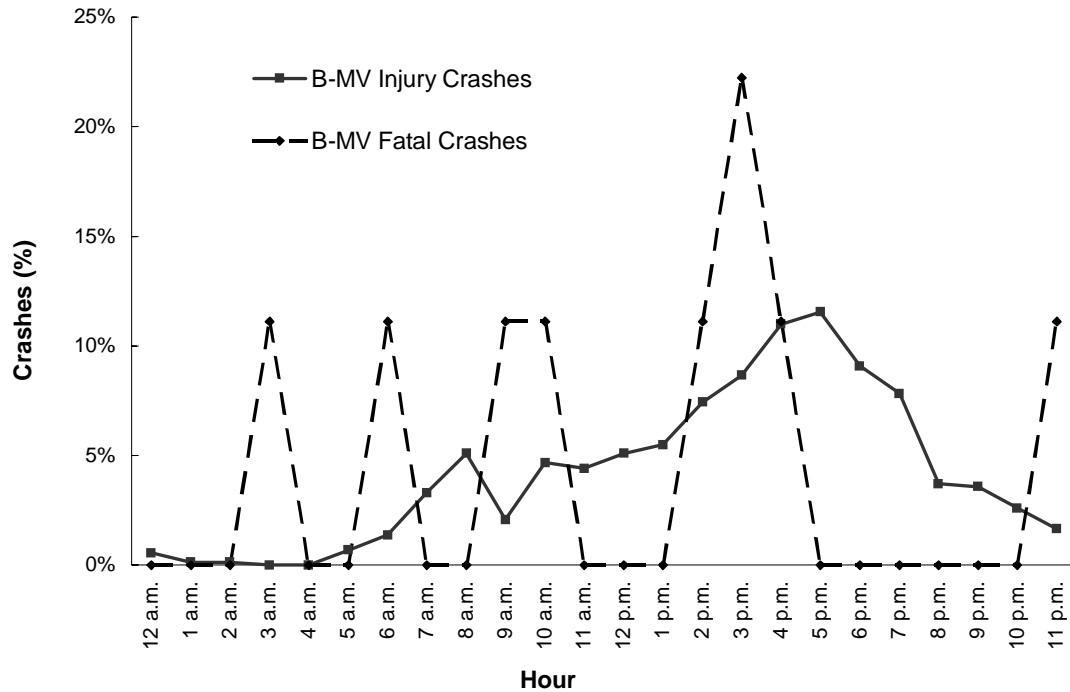
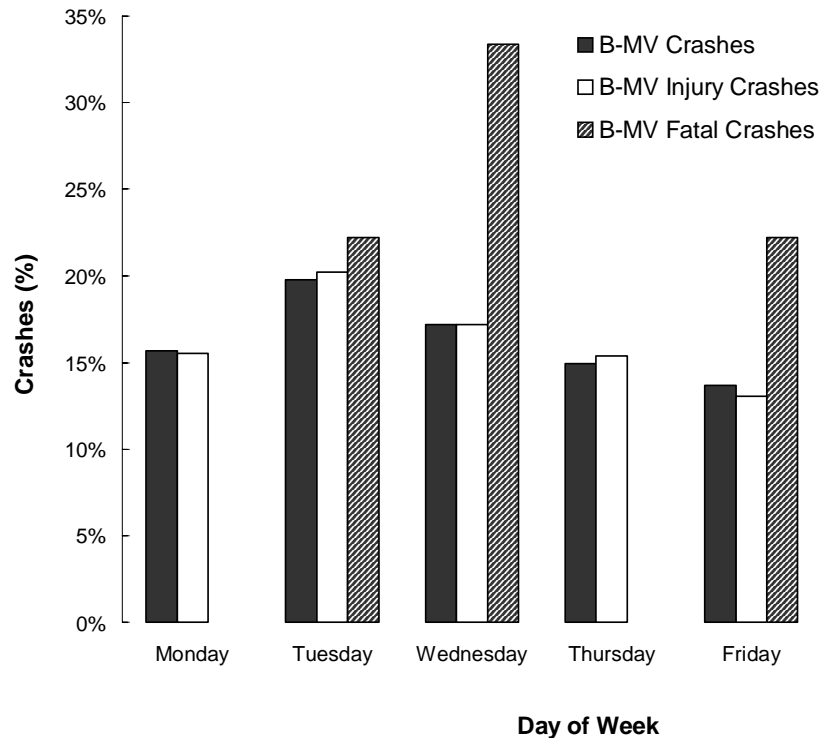


Table 4.05 Month of Bicyclist-Motor Vehicle (B-MV) Crashes, Injury Crashes and Fatal Crashes, 1998

Crash Month	B-MV Crashes		B-MV Injury Crashes		B-MV Fatal Crashes	
	#	Rate per Day	#	Rate per Day	#	Rate per Day
January	37	1.2	32	1.0	2	0.1
February	26	0.9	19	0.7	1	0.0
March	49	1.6	45	1.5	0	0.0
April	65	2.2	59	2.0	0	0.0
May	61	2.0	53	1.7	0	0.0
June	102	3.4	96	3.2	0	0.0
July	135	4.4	119	3.8	2	0.1
August	106	3.4	95	3.1	3	0.1
September	100	3.3	92	3.1	0	0.0
October	70	2.3	66	2.1	1	0.0
November	32	1.1	31	1.0	0	0.0
December	21	0.7	21	0.7	0	0.0
Grand Total	804	2.2	728	2.0	9	0.0

The highest percentage of bicyclist-motor vehicle crashes and injury crashes occurred on Tuesday while the lowest number occurred on Sunday (Figure 4.04). One-third of fatal bicyclist-motor vehicle crashes occurred on Wednesday.

Figure 4.04 Day of Week for Bicyclist-Motor Vehicle (B-MV) Crashes, Injury Crashes and



Note: The above graph is based on percentage for the different crash categories. To read the above graph, look at one category across the groups. For example, look at only the white bars (i.e. bicyclist-motor vehicle injury crashes) from day to day. Do not compare the heights of the different crash categories for a specific day.

Table 4.06 Day of Week for Bicyclist-Motor Vehicle (B-MV) Crashes, Injury Crashes and Fatal Crashes, 1998

Day of Week	B-MV Crashes		B-MV Injury Crashes		B-MV Fatal Crashes	
	#	%	#	%	#	%
Monday	126	15.7%	113	15.5%	0	0.0%
Tuesday	159	19.8%	147	20.2%	2	22.2%
Wednesday	138	17.2%	125	17.2%	3	33.3%
Thursday	120	14.9%	112	15.4%	0	0.0%
Friday	110	13.7%	95	13.0%	2	22.2%
Saturday	106	13.2%	96	13.2%	1	11.1%
Sunday	45	5.6%	40	5.5%	1	11.1%
Grand Total	804	100.0%	728	100.0%	9	100.0%

1998 Bicyclist-Motor Vehicle Crash Characteristics

The majority of bicyclist-motor vehicle crashes, injury crashes and fatal crashes occurred in urban areas (Table 4.07). Passenger cars were involved in over half (61%) of bicyclist-motor vehicle crashes and injury crashes. For fatal crashes, passenger cars and pickup trucks/ vans were involved in over half (67%) of the crashes.

Table 4.07 Urban / Rural Location of Bicyclist-Motor Vehicle (B-MV) Crashes, Injury Crashes and Fatal Crashes, 1998

Urban / Rural Location	B-MV Crashes		B-MV Injury Crashes		B-MV Fatal Crashes	
	#	%	#	%	#	%
Rural Area - Up to 5,000	38	4.7%	34	4.7%	2	22.2%
Small Urban - 5,000 to 49,999	44	5.5%	41	5.6%	2	22.2%
Moderate Urban - 50,000 to 199,999	25	3.1%	23	3.2%	0	0.0%
Large Urban - 200,000 or More	625	77.7%	567	77.9%	4	44.4%
Missing	72	9.0%	63	8.7%	1	11.1%
Grand Total	804	100.0%	728	100.0%	9	100.0%

Table 4.08 Type of Vehicles Involved in Bicyclist-Motor Vehicle (B-MV) Crashes, Injury Crashes and Fatal Crashes, 1998

Vehicle Type	B-MV Crashes		B-MV Injury Crashes		B-MV Fatal Crashes	
	#	%	#	%	#	%
Passenger Car	499	61.4%	449	61.2%	3	33.3%
Pickup Truck / Vans	285	35.1%	262	35.7%	3	33.3%
Unknown	15	1.8%	12	1.6%	0	0.0%
Large Truck	9	1.1%	8	1.1%	1	11.1%
Other	5	0.6%	3	0.4%	2	22.2%
Motorcycle	0	0.0%	0	0.0%	0	0.0%
School Bus	0	0.0%	0	0.0%	0	0.0%
Grand Total	813	100.0%	734	100.0%	9	100.0%

Note: More than one vehicle may be involved in a bicyclist- motor vehicle crash. Unknown vehicles are 'hit and run' vehicles.

1998 Bicyclist-Motor Vehicle Crash Violations and Contributing Factors

Table 4.09 Violations for Bicyclist-Motor Vehicle (B-MV) Crashes, Injury Crashes and Fatal Crashes, 1998

Violations	B-MV Crashes		B-MV Injury Crashes		B-MV Fatal Crashes	
	#	%	#	%	#	%
Failure to Yield Right of Way	77	50.0%	75	51.7%	1	100.0%
Improper Lookout	39	25.3%	37	25.5%	0	0.0%
Hit and Run	7	4.5%	7	4.8%	0	0.0%
Driving Under the Influence	6	3.9%	6	4.1%	0	0.0%
Improper Turn	4	2.6%	3	2.1%	0	0.0%
Red Light	4	2.6%	3	2.1%	0	0.0%
Speeding	4	2.6%	1	0.7%	0	0.0%
Negligent Collision	3	1.9%	3	2.1%	0	0.0%
All Other Moving Violations	2	1.3%	2	1.4%	0	0.0%
Reckless Driving	2	1.3%	2	1.4%	0	0.0%
Following Too Close	1	0.6%	1	0.7%	0	0.0%
Improper Backing	1	0.6%	1	0.7%	0	0.0%
Improper Passing	1	0.6%	1	0.7%	0	0.0%
Improper Start and Stop	1	0.6%	1	0.7%	0	0.0%
Stop Sign	1	0.6%	1	0.7%	0	0.0%
Wrong Side of Road	1	0.6%	1	0.7%	0	0.0%
Grand Total	154	100.0%	145	100.0%	1	100.0%

Law enforcement officers at the scene cited 19% of drivers involved in a bicyclist-motor vehicle crash for a traffic violation. The leading violation was "failure to yield right of way" (50%). Six of the drivers involved in bicycle crashes were cited for a "DUI". One of the drivers involved in fatal bicycle crashes received a citation.

The factors contributing to bicycle-motor vehicle crashes are listed in Table 4.10. These factors were coded by the law officers at the scene for motor vehicles involved in the crash. The officer may record no contributing factor or up to two different contributing factors. The primary contributing factors recorded for bicyclist-motor vehicle crashes and injury crashes were "improper lookout" (43%), "failure to yield right of way" (31%), and "hit and run" (10%). "DUI" and "had been drinking" accounted for 1% of contributing factors in bicyclist-motor vehicle crashes and injury crashes. No contributing factors were recorded for fatal bicyclist-motor vehicle crashes.

Table 4.10 Contributing Factors of Bicyclist-Motor Vehicle (B-MV) Crashes and Injury Crashes, 1998

Contributing Factors	B-MV Crashes		B-MV Injury Crashes	
	#	%	#	%
Improper Lookout	225	43.0%	204	42.7%
Failed to Yield the Right of Way	160	30.6%	154	32.2%
Hit and Run	53	10.1%	47	9.8%
Speed Too Fast	17	3.3%	13	2.7%
Other Improper Driving	14	2.7%	13	2.7%
Disregarded Traffic Signal	10	1.9%	8	1.7%
Improper Turn	9	1.7%	8	1.7%
Drove Left of Center	5	1.0%	5	1.0%
Passed Stop Sign	5	1.0%	4	0.8%
Driving Under the Influence	4	0.8%	4	0.8%
Had Been Drinking	2	0.4%	2	0.4%
Improper Backing	2	0.4%	1	0.2%
Improper Overtaking	2	0.4%	2	0.4%
Improper Parking	2	0.4%	2	0.4%
Non-Contact Vehicle Involved	2	0.4%	1	0.2%
Other Defective Condition	2	0.4%	2	0.4%
Asleep	1	0.2%	1	0.2%
Brakes Defective	1	0.2%	1	0.2%
Explosion or Fire	1	0.2%	0	0.0%
Eyesight Defective Uncorrected	1	0.2%	1	0.2%
Failed to Signal	1	0.2%	1	0.2%
Following Too Closely	1	0.2%	1	0.2%
Headlights Glaring	1	0.2%	1	0.2%
Windshield Not Clear	1	0.2%	1	0.2%
Wrong Side of Road	1	0.2%	1	0.2%
Grand Total	523	100.0%	478	100.0%

1998 Drivers Involved in Bicyclist-Motor Vehicle Crashes

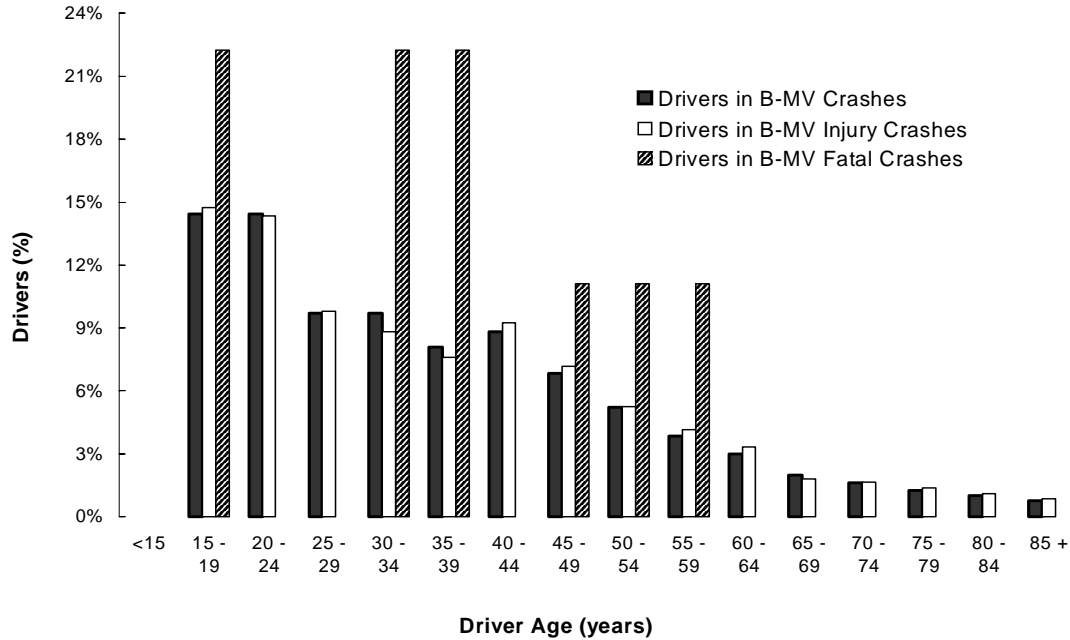
Drivers between the ages of 15 to 24 years represented the greatest percentage of motor vehicle drivers (29%) involved in a bicyclist-motor vehicle crash. While drivers aged 30 to 39 years accounted for the largest percentage of drivers (44%) involved in fatal bicyclist-motor vehicle crashes (Table 4.11). Table 4.12 shows that half (52%) of motor vehicle drivers involved in bicycle-motor vehicle crashes were male, slightly smaller than the percentage of all motor vehicle crashes involving a male driver (58%).

Table 4.11 Age of Drivers Involved in Bicyclist-Motor Vehicle (B-MV) Crashes, Injury Crashes and Fatal Crashes, 1998

Driver's Age	B-MV Crashes		B-MV Injury Crashes		B-MV Fatal Crashes	
	# Drivers	%	# Drivers	%	# Drivers	%
<15	0	0.0%	0	0.0%	0	0.0%
15 - 19	116	14.4%	107	14.7%	2	22.2%
20 - 24	116	14.4%	104	14.3%	0	0.0%
25 - 29	78	9.7%	71	9.8%	0	0.0%
30 - 34	78	9.7%	64	8.8%	2	22.2%
35 - 39	65	8.1%	55	7.6%	2	22.2%
40 - 44	71	8.8%	67	9.2%	0	0.0%
45 - 49	55	6.8%	52	7.2%	1	11.1%
50 - 54	42	5.2%	38	5.2%	1	11.1%
55 - 59	31	3.9%	30	4.1%	1	11.1%
60 - 64	24	3.0%	24	3.3%	0	0.0%
65 - 69	16	2.0%	13	1.8%	0	0.0%
70 - 74	13	1.6%	12	1.7%	0	0.0%
75 - 79	10	1.2%	10	1.4%	0	0.0%
80 - 84	8	1.0%	8	1.1%	0	0.0%
85 +	6	0.7%	6	0.8%	0	0.0%
Missing	76	9.4%	65	9.0%	0	0.0%
Grand Total	805	100.0%	726	100.0%	9	100.0%

Note: More than one driver may be involved in bicyclist-motor vehicle crashes and driver information may be missing (e.g. a hit and run).

Figure 4.05 Age of Drivers Involved in Bicyclist-Motor Vehicle (B-MV) Crashes, Injury Crashes and Fatal Crashes, 1998 (See Table 4.11 for values)



Note: The above graph is based on percentage for the different crash categories. To read the above graph, look at one category across the groups. For example, look at only the white bars (i.e. drivers in bicyclist-motor vehicle injury crashes) from age group to age group. Do not compare the heights of the different crash categories for a specific age group.

Table 4.12 Gender of Drivers Involved in Bicyclist-Motor Vehicle (B-MV) Crashes, Injury Crashes and Fatal Crashes, 1998

Driver's Gender	B-MV Crashes		B-MV Injury Crashes		B-MV Fatal Crashes	
	# Drivers	%	# Drivers	%	# Drivers	%
Female	338	42.0%	306	42.1%	2	22.2%
Male	417	51.8%	376	51.8%	7	77.8%
Missing	50	6.2%	44	6.1%	0	0.0%
Grand Total	805	100.0%	726	100.0%	9	100.0%

1998 Bicyclist Injury Severity

Figure 4.06 Bicyclist Injury Severity as Reported by Police, 1998 (n=839)

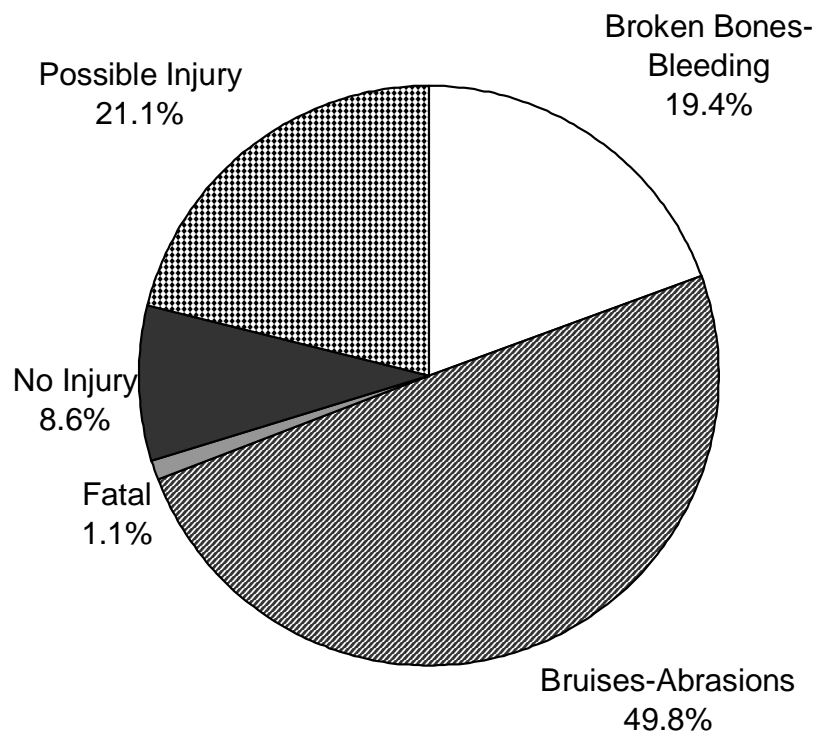


Figure 4.06 shows that the majority of bicyclists sustained an injury (91%) compared to 22% of all motor vehicle crash participants. The percentage of bicyclist fatalities (1%) was higher than for all motor vehicle crash participants (0.2%). There were 9 bicyclists killed on Utah public roadways in 1998, compared to 3 bicyclists killed during 1997.

Table 4.13 shows the number of bicyclists, injured bicyclists and bicyclist fatalities involved in motor vehicle crashes by county. While most of bicyclists were involved in crashes occurring in Salt Lake County, this county did not have the highest rates per vehicle miles traveled. The leading county for bicyclists and injured bicyclists involved in a motor vehicle crash per miles traveled was Utah County.

1998 Bicyclists by County

Table 4.13 Bicyclists, Injured Bicyclists and Bicyclist Fatalities by County, 1998

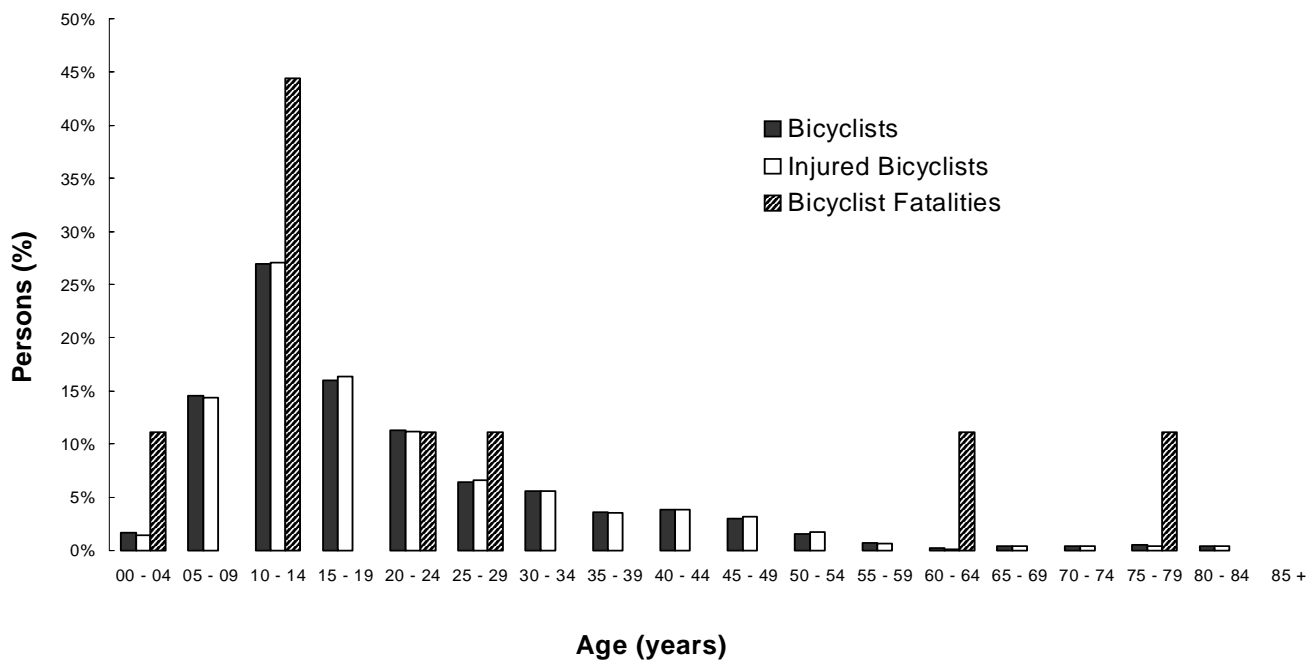
County	Bicyclists			Injured Bicyclists			Bicyclist Fatalities		
	#	Rate per	Rate Per	#	Rate per	Rate Per	#	Rate per	Rate Per
		100	10,000		100	10,000		10,000	100,000
	MVMT	Population		MVMT	Population		MVMT	Population	
Beaver	3	1.5	4.7	3	1.5	4.7	0	0.0	0.0
Box Elder	10	1.2	2.4	9	1.0	2.2	1	11.6	2.4
Cache	39	5.3	4.3	37	5.0	4.1	0	0.0	0.0
Carbon	5	1.5	2.3	4	1.2	1.8	1	29.8	4.5
Daggett	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Davis	46	2.3	2.0	41	2.1	1.8	1	5.1	0.4
Duchesne	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Emery	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Garfield	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Grand	7	2.7	7.0	6	2.3	6.0	0	0.0	0.0
Iron	5	0.9	1.6	5	0.9	1.6	0	0.0	0.0
Juab	2	0.6	2.5	1	0.3	1.3	1	31.3	12.7
Kane	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Millard	3	0.8	2.4	2	0.5	1.6	0	0.0	0.0
Morgan	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Piute	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Rich	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Salt Lake	433	6.1	5.1	382	5.4	4.5	3	4.2	0.4
San Juan	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Sanpete	1	0.5	0.5	1	0.5	0.5	0	0.0	0.0
Sevier	2	0.6	1.1	2	0.6	1.1	0	0.0	0.0
Summit	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Tooele	1	0.2	0.3	1	0.2	0.3	0	0.0	0.0
Uintah	6	2.1	2.4	6	2.1	2.4	0	0.0	0.0
Utah	173	6.3	5.2	165	6.0	4.9	0	0.0	0.0
Wasatch	4	1.8	2.9	2	0.9	1.5	0	0.0	0.0
Washington	28	3.3	3.5	25	2.9	3.1	2	23.5	2.5
Wayne	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
Weber	71	5.1	3.9	66	4.7	3.6	0	0.0	0.0
Statewide	839	4.0	4.0	758	3.6	3.6	9	4.2	0.4

1998 Bicyclist Characteristics

Figure 4.07 shows that most bicyclists and injured bicyclists involved in a crash (57%) were between the ages of 5 to 19 years. This same age group represented almost half (44%) of the fatalities. The majority of the bicyclists involved in crashes and almost two-thirds of the bicyclist fatalities were male (Table 4.15).

The actions of the bicyclist prior to the crash are shown in Table 4.16. The leading bicyclists and injured bicyclists actions prior to crash were "riding in roadway with traffic" (21%) and "crossing at intersection with signal" (17%). For the bicyclist who died, almost half (44%) of the actions prior to the crash were "riding in roadway with traffic" .

Figure 4.07 Age of Bicyclists, Injured Bicyclists and Bicyclist Fatalities Involved in a Crash, 1998 (See Table 4.14 for values)



Note: The above graph is based on percentage for the different injury categories. To read the above graph, look at one category across the groups. For example, look at only the white bars (i.e. injured bicyclist) from age group to age group. Do not compare the heights of the different injury categories for a specific age group.

Table 4.14 Age of Bicyclists, Injured Bicyclists and Bicyclist Fatalities, 1998

Age	Bicyclists		Injured Bicyclists		Bicyclist Fatalities	
	#	%	#	%	#	%
00 - 04	14	1.7%	11	1.5%	1	11.1%
05 - 09	122	14.5%	109	14.4%	0	0.0%
10 - 14	226	26.9%	205	27.0%	4	44.4%
15 - 19	134	16.0%	124	16.4%	0	0.0%
20 - 24	95	11.3%	85	11.2%	1	11.1%
25 - 29	54	6.4%	50	6.6%	1	11.1%
30 - 34	47	5.6%	42	5.5%	0	0.0%
35 - 39	30	3.6%	27	3.6%	0	0.0%
40 - 44	32	3.8%	29	3.8%	0	0.0%
45 - 49	25	3.0%	24	3.2%	0	0.0%
50 - 54	13	1.5%	13	1.7%	0	0.0%
55 - 59	6	0.7%	5	0.7%	0	0.0%
60 - 64	2	0.2%	1	0.1%	1	11.1%
65 - 69	3	0.4%	3	0.4%	0	0.0%
70 - 74	3	0.4%	3	0.4%	0	0.0%
75 - 79	4	0.5%	3	0.4%	1	11.1%
80 - 84	3	0.4%	3	0.4%	0	0.0%
85 +	0	0.0%	0	0.0%	0	0.0%
Missing	26	3.1%	21	2.8%	0	0.0%
Grand Total	839	100.0%	758	100.0%	9	100.0%

Table 4.15 Gender of Bicyclists, Injured Bicyclists and Bicyclist Fatalities, 1998

Gender	Bicyclists		Injured Bicyclists		Bicyclist Fatalities	
	#	%	#	%	#	%
Male	700	83.4%	633	83.5%	6	66.7%
Female	136	16.2%	124	16.4%	3	33.3%
Missing	3	0.4%	1	0.1%	0	0.0%
Grand Total	839	100.0%	758	100.0%	9	100.0%

Table 4.16 Bicyclist Action Prior to Crash, 1998

Bicyclist Action Prior to Crash	Bicyclists		Injured Bicyclists		Bicyclist Fatalities	
	#	%	#	%	#	%
Riding in Roadway With Traffic	172	21.0%	158	21.3%	4	44.4%
Crossing Intersection with Signal	144	17.6%	129	17.4%	0	0.0%
Crossing Intersection No Signal	134	16.4%	116	15.7%	0	0.0%
Riding in Roadway Against Traffic	117	14.3%	110	14.8%	0	0.0%
Crossing Intersection Against Signal	70	8.6%	65	8.8%	0	0.0%
Riding on Sidewalk	64	7.8%	58	7.8%	1	11.1%
Crossing Not at Intersection	57	7.0%	52	7.0%	2	22.2%
Other in Roadway	16	2.0%	16	2.2%	0	0.0%
Coming from Behind Parked Cars	13	1.6%	10	1.3%	0	0.0%
Not Stated	13	1.6%	12	1.6%	0	0.0%
Playing in Roadway	8	1.0%	7	0.9%	1	11.1%
Crossing Intersection Diagonally	5	0.6%	3	0.4%	1	11.1%
Walking on Sidewalk	2	0.2%	2	0.3%	0	0.0%
Hitching on Vehicle	1	0.1%	1	0.1%	0	0.0%
Not in Roadway	1	0.1%	1	0.1%	0	0.0%
Walking To or From School	1	0.1%	1	0.1%	0	0.0%
Grand Total	818	100.0%	741	100.0%	9	100.0%

Alcohol and Other Drugs:

Of the 9 bicyclist fatalities, 1 was impaired by alcohol or other drugs. No impaired motor vehicle drivers were involved in fatal bicyclist-motor vehicle crashes.

Bicyclists and Helmet

Helmet was not coded consistently at the time-of-crash for bicyclists and cannot be reported with accuracy. As a result, it is not included in this summary.